



US 20200361048A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2020/0361048 A1**
(43) **Pub. Date: Nov. 19, 2020**(54) **PROCESS FOR OPERATING A VIRTUAL
SENSOR FOR DETERMINING THE
CONDITION OF A TOOL HOLDER ON A
TOOL MACHINE; VIRTUAL SENSOR FOR
DETERMINING THE CONDITION OF A
TOOL HOLDER AND TOOL MACHINE**(71) Applicant: **POINT 8 GMBH**, Dortmund (DE)(72) Inventors: **Tobias BRAMBACH**, Dortmund (DE);
Kevin DUNGS, Dortmund (DE);
Sebastian SCHNEIDER, Dortmund
(DE); **Julian SURMUANN**, Kamen
(DE); **Kai BRUGGE**, Bochum (DE)(73) Assignee: **POINT 8 GMBH**, Dortmund (DE)(21) Appl. No.: **16/865,446**(22) Filed: **May 4, 2020**(30) **Foreign Application Priority Data**

May 15, 2019 (DE) 102019112775.0

Publication Classification(51) **Int. Cl.**
B23Q 17/00 (2006.01)**B23Q 17/20** (2006.01)(52) **U.S. Cl.**
CPC **B23Q 17/003** (2013.01); **B23Q 17/20**
(2013.01); **B23Q 17/005** (2013.01)(57) **ABSTRACT**

A process for operating a virtual sensor for determining the condition of a tool holder on a tool machine, such as a spindle, and the condition of a tool machine which has at least one tool holder and at least one tool, attached or attachable to the tool holder, which allows a workpiece to be processed by running a machine program, and which has at least one control unit comprising at least one sensor.

